

Port Phillip and Westernport Region Flood Management and Drainage Strategy Discussion Paper

Response from the Office of the Emergency Services Commissioner

| Issue | Challenge | OESC Response |
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| 1 An agreed approach to managing existing regional flood problems | Is it reasonable that we focus resources only to address intolerable flood risk? | <p>The paper implies that risk assessments will generate results of no risk, tolerable risk or intolerable risk, and only the areas assessed as having intolerable will receive attention until their risk levels are reduced to tolerable. A risk assessment that included one or two additional levels of risk would be more acceptable to the community and could provide MWC with more flexibility in dealing with community expectations. The task of selecting criteria and descriptors for a flood risk assessment should involve a range of stakeholders.</p> <p>It would not be reasonable to focus resources only on the intolerable risks, a scale with more steps would allow for graduation in the types of risk treatments applied.</p> <p>The concept of intolerable is a major question in itself, (see below) but if MWC seeks to restrict its expenditure in that way, it could find communities with 'tolerable' flood risk expressing extreme dissatisfaction if no assistance is available.</p> <p>In any case, addressing intolerable flood risk is itself a crude measure for priority-setting. Consideration should be given to the UK proposal to also utilise outcome measures as a second-order priority setting tool.¹ For example an outcome measure could be the reduction in the number of houses subject to over-floor flooding.</p> <p>Ideally, a risk assessment would generate a list of priorities that need attention according to the criteria selected. An allocation of remedial funds over a long period, say 30-50 years, could be an option.</p> <p>The impact of this policy approach on the rest of the State should also be considered. It would not be acceptable to have a standard for the Port Phillip and Westernport Catchments that is substantially different from the other catchments.</p> |
| | How should we then address remaining tolerable risks? | <p>Areas of 'tolerable' flood risk will vary in their level of risk. Those areas rated as of high risk should be entitled to receive a range of types of assistance, including warning systems, community awareness and emergency services.</p> <p>Any area that is rated as having intolerable risk will still need a range of treatments even if the risk is brought to tolerable (but still severe) level by an expensive intervention.</p> |

¹ *Consultation on Outcome Measures and prioritisation approaches for flood and coastal erosion risk management* December 2006, UK Department for Environment Food and Rural Affairs.

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| | Who should be involved in determining what is tolerable and intolerable risk? | <p>This will be a challenging exercise. The term <i>intolerable</i> implies subjective judgement and it could be easy for community and professional views to diverge. As well as flood experts, the affected communities must be involved in the determination of levels of risk, a process which should be embedded in activities promoting community education and awareness. Experience demonstrates that communities can be more accepting of high levels of threat if they are engaged as responsible partners and participate in determining risk treatments.</p> <p>In general, the determination of intolerable risk by application of the definition should be a responsibility of MWC, with involvement of the affected community. There may even need to be an appeal process to assure the community that MWC is subject to some independent arbiter.</p> <p>It may be necessary to engage or establish an external/independent body, or for the Government itself, to <i>define</i> intolerable risk and its characteristics. It is also important to bear in mind that a general definition of intolerable risk may well be applied to a range of other hazards such as fire, road crash, infectious disease, hazardous materials control etc. It might be desirable to strictly refer to flood risk and use flood terminology so as to quarantine the definition and its process.</p> <p>It might also be worth using a less emotive and subjective term than intolerable, like <i>extreme</i>.</p> |
| | What is a reasonable time frame in which to remove intolerable risks? | OESC would suggest no more than 30 years. |
| | Should we consider the acquisition of private properties that are considered to be at extreme risk? | Yes, noting use of the term <i>extreme</i> to describe the highest level of risk. There is no <i>a priori</i> reason to exclude this approach. |

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| 2 Completing the knowledge base | Is there a need for an ongoing flood impact research program? | The answer depends in part, on the purpose of the research program. In any case, the onus should not be on MWC alone to fund a research program. This is a national issue, and other participants should be brought into consideration. |
| | What are the research priorities e.g. high risk areas, post event evaluation? | <p>OESC questions the statement on p. 19 that ‘an understanding and assessment of a full range of intangible impacts is critical to the determination of priorities for future flood management...’. Firstly, this information may not be readily available; its unavailability should not be allowed to become an obstacle to progressing a strategy. Secondly, it would only be critical if it were thought to generate a risk profile different from a profile generated using only tangible impacts.</p> <p>As it is likely that intangible damages rise in proportion to tangible damages, the use of tangible damages alone as a proxy for total damages should be practicable. It is realised that a robust dollar valuation for intangible damages would affect the outcomes of cost/benefit analyses. Again, there should be some approximations available to apply in this context, such as an ‘inflation’ factor of say, 20%.</p> <p>Setting a flood research agenda should be a collaborative process. A broad based agenda would include technical aspects, a social impact component including community engagement/awareness, and better data for risk estimation. There is already a lot of national and international activity, and a good body of knowledge. A tertiary institution such as RMIT University could be of assistance.</p> |
| | Who is best placed to co-ordinate such a program? | At State level, the State Flood Policy Committee should accept a role in this area. There may be justification for creating a flood research sub-committee. At national level, the National Flood Risk Advisory Group should also have a key role. |
| | Where are the priority areas for additional flood mapping to be undertaken? | OESC does not have an opinion on this matter. |
| | Who is best placed to manage and co-ordinate flood mapping projects? | The State Flood Policy Committee should be well placed to exercise a decision-making role. |
| | How can these projects be resourced and funded? | <p>While some funding has been available to councils and CMAs via the Natural Disaster Mitigation Programme, there is no assured future to this scheme. If it is extended, the State would have to commit funds to this purpose, as would CMAs and councils. The capacity for CMA's and MWC to source public funds for this purpose would be desirable.</p> <p>The current split of drainage responsibilities in the Port Phillip and Westernport Regions between MWC and councils seems to be a significant issue in this regard. The motivation, capability and ability of councils cannot match that of MWC, to the potential detriment of thousands of householders. As MWC has greater financial and technical capacity, it should take over responsibility for all catchments in its area of responsibility, ie those <60ha.</p> |
| | What is the most appropriate forum to make this information publicly available and how should such communications be managed? | There is probably no ‘most appropriate forum’. Rather, a range of means should be used. Some flood maps are already available on the Internet – this is a medium that could be further utilised. |

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| 3 Potential long term future pressures on existing drainage systems | How can we better understand the timing and location of dispersed infill development and plan for it? | OESC does not have an opinion on this matter. |
| | How do we determine where redevelopment will have an intolerable impact on levels of service? | OESC does not have an opinion on this matter. |
| | What should we do in areas where it is not possible, practical or affordable to undertake works to accommodate additional run-off? | OESC does not have an opinion on this matter. |
| | How do we plan in advance for the potential and uncertain impacts of climate change? | Clearly, risk estimations can no longer assume a steady state as regards climate and weather inputs. There needs to be a shift in thinking in relation to eg flood related infrastructure that allows specifications to vary over relatively short time spans in response to the best estimates of future conditions. The National Climate Change Adaptation Programme (Australian Greenhouse Office) has undertaken to provide 'specific guidance for key sectors eg maximum possible precipitation charts for engineers and guides for local government'. |
| | What are some of the possible responses to the impacts of climate change? | One possible response is to apply the information in Figure 8 in the Discussion Paper to risk estimates. This will generate a greater number of places with risk rated as extreme/intolerable, however, it could be irresponsible not to take such an approach. |
| | When would it be appropriate to implement adaptation strategies? | Adaptation has already begun. Strategies should be adopted as soon as they are agreed. |
| 4 Enhanced community education, flood awareness and preparation | Who should lead and sponsor on-going research into future pressures on the urban drainage system represented by climate change? | The answer to this question should be in similar terms to the other questions about research. This is also a national issue, although MWC should consider being a contributor in at least financial as well as knowledge resources. |
| | Who is best placed to co-ordinate and manage an on-going community education and awareness program? | OESC supports VICSES' efforts to establish the capacity to take greater responsibility for this type of service across the State. |
| | What should be the role of other stakeholders in developing and implementing a community education and awareness framework? | Other stakeholders such as MWC and councils must be engaged in community education and awareness according to their knowledge, skills and responsibilities. Where there are specific local issues needing attention, agencies such as MWC may have to take the lead role in engaging with the local community, if it has a key role in providing a solution. |
| | What are the key objectives and tools of a community education and awareness framework? | In order to discharge this role, MWC needs to have either in-house or retained people who specialise in this type of community engagement activities. A community education and awareness strategy should aim to inform people about any specific risks they face, actions they can take to be aware of a flood that threatens or is occurring, any warning procedures that may be utilised, and motivate them to prepare for and take actions to enhance personal safety and minimise damage to buildings and possessions. The overarching objective should be to establish a shared responsibility for managing flood risk. |
| | What are the main impediments to the inclusion of flood information in planning schemes? | OESC does not have an opinion on this matter. |
| | How could these impediments be removed? | OESC does not have an opinion on this matter. |
| Who is the most appropriate agency to control developments outside existing flood prone areas that may have an adverse impact on flood levels or the environmental values of floodplains? How might this be achieved? | OESC does not have an opinion on this matter. | |

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| 5 Agreed responsibilities and improved collaboration between flood management agencies | Is there a need for greater collaboration between flood management agencies? | This is always a desired improvement. Another essential attribute of collaboration is <i>sustained</i> . For collaboration on an ongoing basis, experience shows that a framework or system of interagency groups/committees is needed. Maintenance of the system does need to be assigned to a small number of key agencies. This is the model being established for the Integrated Fire Management Planning framework. |
| | What activities require greater collaboration? | All flood management activities (mitigation, response and recovery) benefit from greater collaboration. That is the essence of the emergency management model – many agencies working together to meet common objectives, applying their particular areas of expertise. Through the development of this strategy, MWC has the opportunity to be more engaged in a wide range of flood management activities in collaboration with other agencies. |
| | What aspects need greater capacity building within agencies and which aspects should be centralised | The concept of centralised capability is very rare indeed in emergency management. Most capability is located within agencies, and can be applied in collaboration with other agencies. One aspect that can be usefully centralised is research, provided that users have input into defining the research questions. The potential benefits of a CRC-type body are evident here. |
| | Who should take lead in establishing a collaborative framework/approach? | The State Flood Policy Committee has accepted the recommendation that there should be a multi-level flood management planning framework for Victoria. The main outcome of that project should be the establishment of a viable collaborative framework. |
| | Could the development of Municipal Emergency Management Plans be an appropriate mechanism to coordinate activities? | A municipally based planning committee, rather than the plan, could be a coordinating mechanism. However, the flood management planning framework should also have State and regional components, as some stakeholder agencies operate on a regional basis. The regions adopted may be based on catchment and sub-catchment boundaries. |
| | Who should lead the coordination and development of flood management activities in the region? | All regions in Victoria should operate according to a consistent model, led by the State Flood Policy Committee, whose name and Terms of Reference should be amended to facilitate this, plus regional flood management planning committees. Each committee will need an agency to assume a leadership role. Given the breadth of activities in flood management, and given that flood damage minimisation is mostly achieved through mitigation activities, the appropriate agencies will probably be the catchment management agencies such as MWC. |